

Smiljanic 2000-0230

16. (Currently Amended) The methods of claim[[s]] 12 ~~or 13~~ wherein steps 3 and 4 of the claim 1 method are replaced with ~~the previously proposed~~ parallel iterative matching algorithm (PIM) ~~which is maximal matching algorithm defined in claim 15.~~

17. (Currently Amended) The method of claim 13 ~~wherein applied to the bandwidth allocation in wide area network,~~ wherein switches in a wide area network advertise to other switches reserved bandwidth on all its input and output links:

$$B_i \sum_m a_{im} / F, \quad B_j \sum_m a_{mj} / F, \quad 0 \leq i, j \leq N-1,$$

where B_i, B_j are bit-rates of the corresponding links[. When], and when a new bandwidth ΔB is requested between two nodes in the network, then all links for which:

$\Delta B > B_j / 2 - B'_j$, are excluded from the network if B_i is the link bit-rate, and B'_j is the link reserved bit-rate (bandwidth), and bandwidth is reserved according to any routing protocol (such as OSPF) using remaining links from the source to the destination.

18. (Currently Amended) The method of claim 1 implemented for short packet transmission time T wherein new bandwidth can be allocated fast by using the methods of claims 12 or 13 within time FT ~~even for long frames lengths F , wherein F is an integer corresponding to the number of time slots in said frame and wherein one time slot per frame guarantees bandwidth of B/F by using the methods of claims 12 or 13,~~ where B is the line bit-rate and a minimum guaranteed bandwidth can be made low by increasing F .

19. (Currently Amended) An apparatus for allocating bandwidth for use at a packet switch having a plurality of inputs for switching to specified outputs and a plurality of corresponding input buffers having input-output queues, said buffers being coupled to said input-output queues ~~and~~ having associated counters, said ~~method~~ apparatus comprising the steps of:

~~time division means for dividing time into a plurality of frames of time slots, each frame having a negotiated integer value of time slots;~~